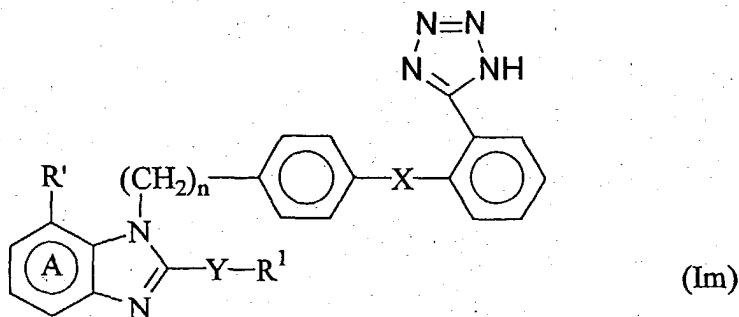
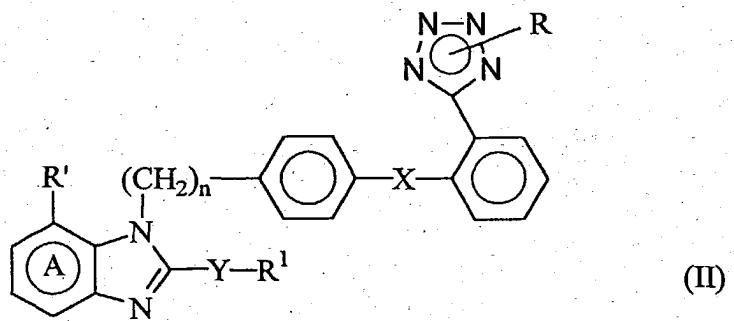


We claim:

1. A method for producing a compound represented by the formula:

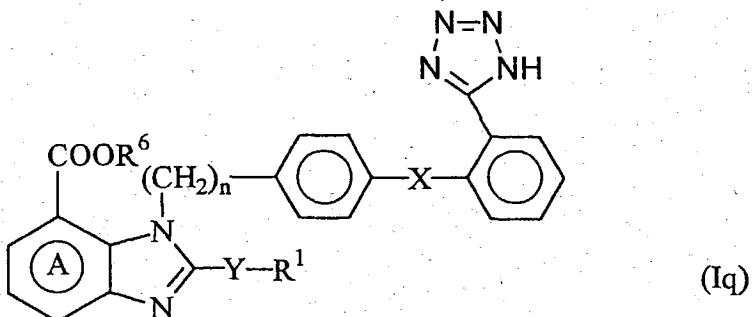


5 wherein the ring A is a benzene ring which may be substituted in addition to the R' group; R¹ is hydrogen or an optionally substituted hydrocarbon residue; X is a direct bond or a spacer having an atomic length of one or two or less between the phenylene group and the phenyl group; Y is -O-, -S(O)m- or -N(R⁴)- wherein m is an integer of 0, 1 or 2 and R⁴ is hydrogen or an optionally substituted alkyl group; R' is carboxyl, an ester thereof, an amide thereof or
 10 a group capable of forming an anion or a group convertible thereto; n is an integer of 1 or 2; or a pharmaceutically acceptable salt thereof, which comprises deprotecting a compound represented by the formula:

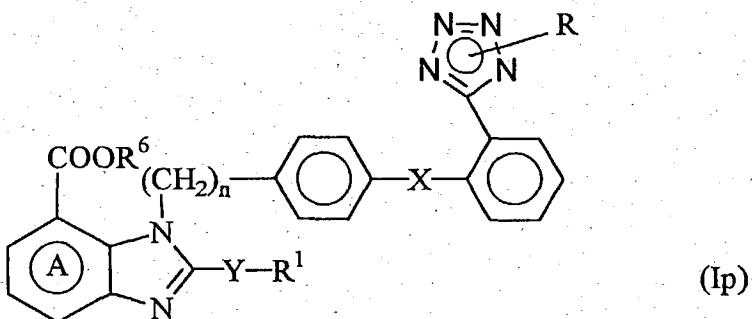


15 wherein R is triphenylmethyl, 2-tetrahydropyranyl, methoxymethyl or ethoxy methyl, and the other symbols have the same meanings as defined above; or a pharmaceutically acceptable salt thereof.

2. A method for producing a compound represented by the formula:

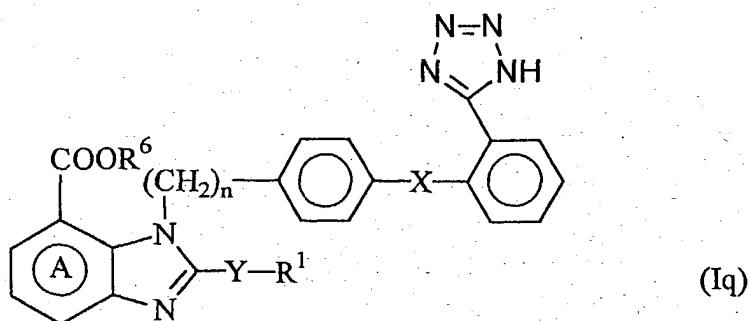


wherein the ring A is a benzene ring which may be substituted in addition to the group of
 5 -COOR⁶ group; R¹ is hydrogen or an optionally substituted hydrocarbon residue; X is a direct
 bond or a spacer having an atomic length of one or less between the phenylene group and the
 phenyl group; Y is -O-, -S(O)m- or -N(R⁴)- wherein m is an integer of 0, 1 or 2 and R¹ is
 10 hydrogen or an optionally substituted alkyl group; R⁶ is a lower (C₁₋₆) alkyl optionally
 substituted with lower (C₂₋₆) alkanoyloxy, 1-lower (C₁₋₆) alkoxy carbonyloxy; n is an integer
 15 of 1 or 2; or a pharmaceutically acceptable salt thereof, which comprises deprotecting a
 compound represented by the formula:



15 wherein R is triphenylmethyl, 2-tetrahydropyranyl, methoxymethyl or ethoxy methyl, and the
 other symbols have the same meanings as defined above; or a pharmaceutically acceptable
 salt thereof.

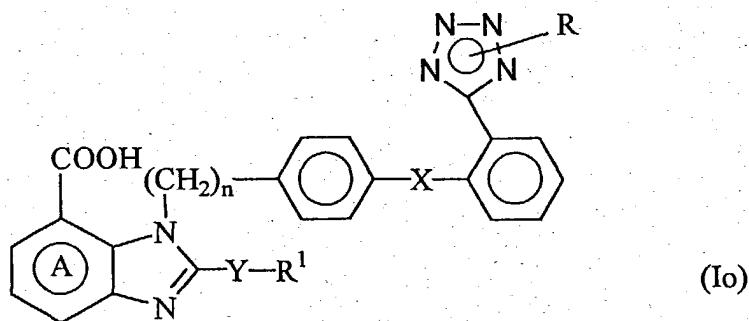
3. A method for producing a compound represented by the formula:



wherein the ring A is a benzene ring which may be substituted in addition to the group of

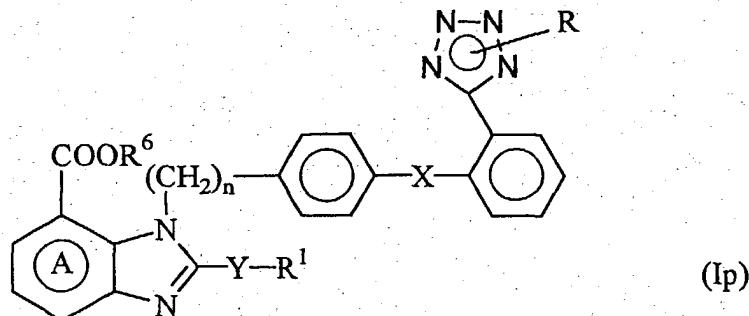
5 -COOR⁶ group; R¹ is hydrogen or an optionally substituted hydrocarbon residue; X is a direct bond or a spacer having an atomic length of one or less between the phenylene group and the phenyl group; Y is -O-, -S(O)m- or -N(R⁴)- wherein m is an integer of 0, 1 or 2 and R⁴ is hydrogen or an optionally substituted alkyl group; R⁶ is a lower (C₁₋₆) alkyl optionally substituted with lower (C₂₋₆) alkanoyloxy, 1-lower (C₁₋₆) alkoxy carbonyloxy; n is an integer
10 of 1 or 2; or a pharmaceutically acceptable salt thereof, which comprises;

(i) reacting a compound represented by the formula:



wherein R is triphenylmethyl, 2-tetrahydropyranyl, methoxymethyl or ethoxy methyl, and the

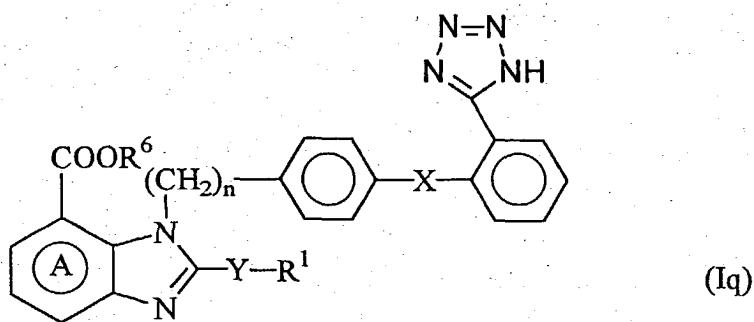
15 other symbols have the same meanings as defined above, or a pharmaceutically acceptable salt thereof, with an alkylating agent to give a compound represented by the formula:



wherein each symbol has the same meaning as defined above; or a pharmaceutically acceptable salt thereof; and then,

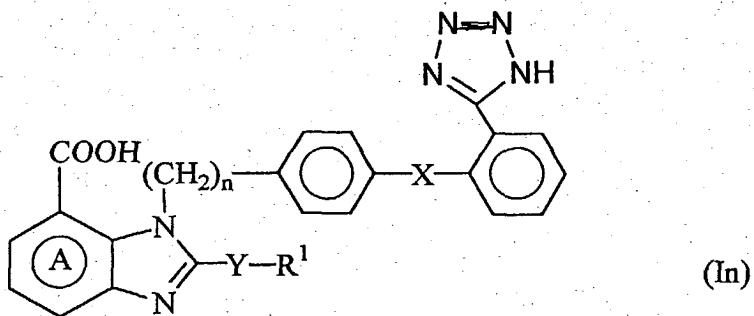
- (ii) deprotecting the compound (Ip) or a pharmaceutically acceptable salt thereof.

5 4. A method for producing a compound represented by the formula:

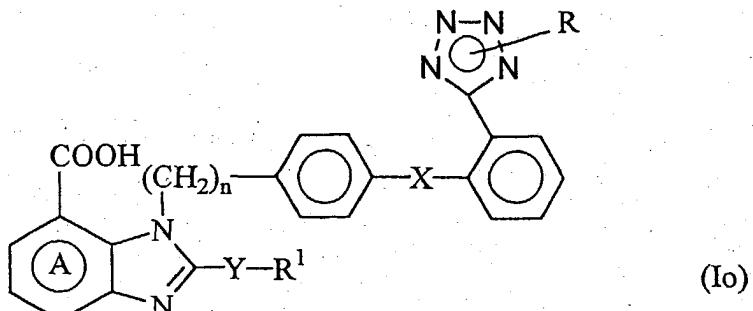


wherein the ring A is a benzene ring which may be substituted in addition to the group of
 10 -COOR⁶ group; R¹ is hydrogen or an optionally substituted hydrocarbon residue; X is a direct bond or a spacer having an atomic length of one or two or less between the phenylene group and the phenyl group; Y is -O-, -S(O)m- or -N(R⁴)- wherein m is an integer of 0, 1 or 2 and R⁴ is hydrogen or an optionally substituted alkyl group; R⁶ is a lower (C₁₋₆) alkyl optionally substituted with lower (C₂₋₆) alkanoyloxy, 1-lower (C₁₋₆) alkoxy carbonyloxy; n is an integer
 15 of 1 or 2; or a pharmaceutically acceptable salt thereof, which comprises;

- (i) reacting a compound represented by the formula:

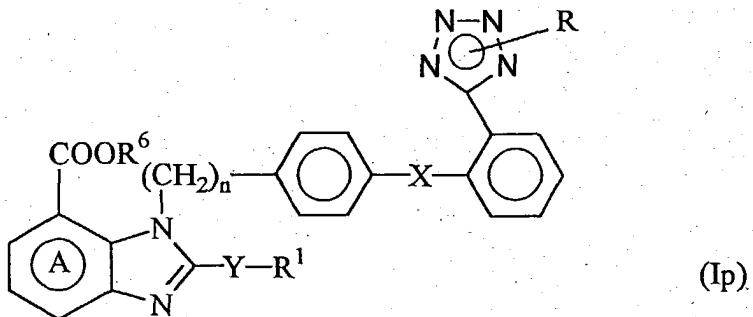


wherein each symbol has the same meaning as defined above, or a pharmaceutically
 20 acceptable salt thereof with an alkylating agent to give a compound represented by the formula:



wherein R is triphenylmethyl, 2-tetrahydropyranyl, methoxymethyl or ethoxy methyl, and the other symbols have the same meanings as defined above, or a pharmaceutically acceptable salt thereof;

(ii) reacting the compound (Io) or a pharmaceutically acceptable salt thereof with an alkylating agent to give a compound represented by the formula:



wherein each symbol has the same meaning as defined above; or a pharmaceutically acceptable salt thereof; and then,

(iii) deprotecting the compound (Ip) or a pharmaceutically acceptable salt thereof.

5. A method according to any one of claims 1 to 4, wherein R¹ is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl, or aralkyl group.

15 6. A method according to any one of claims 1 to 4, wherein R¹ is an alkyl, alkenyl, alkynyl, or cycloalkyl group, which may be substituted with hydroxyl, an optionally substituted amino group, halogen or a lower (C₁₋₄) alkoxy group.

20 7. A method according to any one of claims 1 to 4, wherein R¹ is a lower (C₁₋₃) alkyl or lower (C₂₋₅) alkenyl group optionally substituted with hydroxyl, an amino group, halogen or a lower (C₁₋₄) alkoxy group.

8. A method according to claim 6, wherein the alkyl is a lower alkyl group having 1 to about 8 carbon atoms, which may be straight or branched.

5 9. A method according to claim 8, wherein the lower alkyl group is unsubstituted or substituted with hydroxyl, an optionally substituted amino group, halogen or a lower (C_{1-4}) alkoxy group.

10 10. A method according to any one of claims 1 to 4, wherein R^1 is a lower alkyl group having 1 to about 8 carbon atoms.

11. A method according to claim 5, wherein the aryl group is phenyl which may be substituted with halogen, nitro, lower (C_{1-4}) alkoxy, or lower (C_{1-4}) alkyl.

12. A method according to claim 5, wherein the aralkyl group is phenyl-lower
15 (C_{1-4}) alkyl which may be substituted with halogen, nitro, lower (C_{1-4}) alkoxy, or lower (C_{1-4}) alkyl.

20 13. A method according to claim 1, wherein R' is a group having the formula:
-CO-D' wherein D' is hydroxyl, optionally substituted amino or optionally substituted
alkoxy.

14. A method according to claim 1, wherein R' is a group having the formula:
-CO-D' wherein D' is hydroxyl or optionally substituted alkoxy.

25 15. A method according to claim 14, wherein D' is hydroxyl, a lower (C_{1-4}) alkoxy group optionally substituted with hydroxyl, optionally substituted amino, halogen, lower (C_{1-5}) alkoxy, lower (C_{1-4}) alkylthio or optionally substituted dioxolenyl on the alkyl moiety, or a group having the formula: -OCH(R^7)OCOR⁸ wherein R^7 is hydrogen, straight or branched lower alkyl having 1 to 6 carbon atoms, or cycloalkyl having 5 to 7 carbon atoms
30 and R^8 is straight or branched lower alkyl having 1 to 6 carbon atoms, straight or branched lower alkenyl having 2 to about 8 carbon atoms, cycloalkyl having 5 to 7 carbon atoms, lower (C_{1-3}) alkyl which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, lower (C_{2-3}) alkenyl which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, optionally substituted aryl, straight or branched lower

alkoxy having 1 to 6 carbon atoms, straight or branched lower alkenyloxy having 2 to about 8 carbon atoms, cycloalkyloxy having 5 to 7 carbon atoms, lower (C_{1-3}) alkoxy which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, lower (C_{2-3}) alkenyloxy which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, or optionally substituted aryloxy.

16. A method according to claim 1, wherein R' is a group capable of forming an anion or convertible thereinto either chemically or under biological and/or physiological conditions.

10

17. A method according to claim 1, wherein R' is a group capable of forming the residue: -COO- or convertible thereinto.

18. A method according to claim 14, wherein D' is hydroxyl, a lower (C_{1-6}) alkoxy group optionally substituted with hydroxyl, lower (C_{1-6}) alkoxy or optionally substituted dioxolenyl on the alkyl moiety, a lower (C_{2-3}) alkenyloxy optionally substituted with optionally substituted aryl on the alkenyl moiety, or a group having the formula: -OCH(R^7)OCOR⁶ wherein R^7 is hydrogen, or straight or branched lower alkyl having 1 to 6 carbon atoms and R^6 is straight or branched lower alkyl having 1 to 6 carbon atoms, cycloalkyl having 5 to 7 carbon atoms, lower (C_{1-3}) alkyl which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, optionally substituted aryl, straight or branched lower alkoxy having 1 to 6 carbon atoms, cycloalkyloxy having 5 to 7 carbon atoms, lower (C_{1-3}) alkoxy which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, or optionally substituted aryloxy.

25

19. A method according to claim 1, wherein R' is carboxyl or a pharmaceutically acceptable salt or anion thereof.

20. A method according to claim 1, wherein R' is a group having the formula: -CO-OCH(R^7)OCOR⁸ wherein R^7 is hydrogen or straight or branched lower alkyl having 1 to 6 carbon atoms and R^3 is straight branched lower alkyl having 1 to 6 carbon atoms, cycloalkyl having 5 to 7 carbon atoms, optionally substituted phenyl, straight or branched lower alkoxy having 1 to 6 carbon atoms or cycloalkyloxy having 5 to 7 carbon atoms.

21. A method according to claim 1, wherein R' is a tetrazolyl group optionally protected with optionally substituted lower alkyl or acyl, trifluoromethanesulfonic amide, phosphoric acid or sulfonic acid.

5 22. A method according to any one of claims 1 to 4, wherein the ring A is a benzene ring which may contain, in addition to the R' group, a substituent being selected from the group consisting of halogen nitro, cyano, optionally substituted amino, a group having the formula: -W-R³

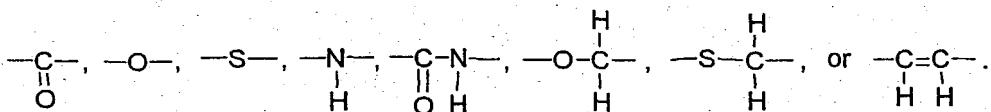
-C-,
wherein W is a chemical bond, -O-, -S-, or ||
O

10 and R³ is hydrogen or an optionally substituted lower alkyl group, a group having the formula: -(CH₂)_m-CO-D wherein D is hydrogen, hydroxyl, optionally substituted amino, or optionally substituted alkoxy, and p is 0 or 1, tetrazolyl optionally protected with an optionally substituted lower alkyl group or an acyl group, trifluoromethanesulfonic amide, phosphoric acid, or sulfonic acid.

15

23. A method according to any one of claims 1 to 4, wherein the ring A is a benzene ring which contains no substitution in addition to the R' group.

24. A method according to anyone of claims 1 to 4, wherein X is a chemical bond, 20 lower (C₁₋₄) alkylene,



25. A method according to any one of claims 1 to 4, wherein X is a chemical bond between the phenylene group and the phenyl group.

25

26. A method according to any one of claims 1 to 4, wherein Y is -O-, -SO_m- wherein m is 0, 1, or 2, or -N(R⁴)- wherein R⁴ is hydrogen or an optionally substituted lower (C₁₋₄) alkyl group.

27. A method according to any one of claims 1 to 4, wherein Y—R¹ is -N(R⁴)-R¹ wherein R¹ and R⁴ are taken together with the N atom attached thereto to form a heterocyclic ring.

5 28. A method according to claim 1, wherein the deprotecting reaction is conducted in an aqueous alcohol containing about 0.5N to 2N hydrochloric acid or acetic acid.

10 29. A method according to claim 3 or 4, wherein the alkylating reaction is conducted in the presence of a base.

15 30. A method according to any one of claims 2 to 4, wherein the deprotecting reaction is conducted under acid condition.

20 31. A method according to claim 3 or 4, wherein the alkylating agent is halides.

25 32. A method according to claim 4, wherein the alkylating agent used in the reaction (i) of compound (In) with alkylating agent, is selected from triphenylmethyl chloride and methoxy methyl chloride.

30 33. A method according to claim 3 or 4, wherein the alkylating agent used in the reaction of compound (Io) with alkylating agent, is selected from cyclohexyl 1-iodoethyl carbonate, ethyl 1-iodoethyl carbonate, and pivaloyloxymethyl iodide.

35. A method for producing 1-(cyclohexyloxycarbonyloxy)ethyl 2-ethoxy-1-[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylate or a pharmaceutically acceptable salt thereof, which comprises deprotecting 1-(cyclohexyloxycarbonyloxy)ethyl 2-ethoxy-1-[2'-(N-triphenylmethyltetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylate or a pharmaceutically acceptable salt thereof.

40 35. A method for producing 1-(cyclohexyloxycarbonyloxy)ethyl 2-ethoxy-1-[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylate or a pharmaceutically acceptable salt thereof, which comprises reacting 2-ethoxy-1-[2'-(N-triphenylmethyltetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylic acid or a

pharmaceutically acceptable salt thereof with an alkylating agent, and then subjecting the resulting compound to deprotecting reaction of the tetrazole group.

36. A method for producing 1-(cyclohexyloxycarbonyloxy)ethyl 2-ethoxy-1-[2'-
5 (1H-tetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylate or a pharmaceutically
acceptable salt thereof, which comprises (i) reacting 2-ethoxy-[2'-(1H-tetrazol-5-
yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylic acid or a pharmaceutically acceptable
salt thereof with an alkylating agent to give 2-ethoxy-1-[2'-N-triphenylmethyltetrazol-5-
yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylic acid or a pharmaceutically acceptable
10 salt thereof, (ii) reacting the resulting compound with an alkylating agent, and then
(iii) subjecting the resulting compound to deprotecting reaction of the tetrazole group.